

NEW PUBLICATIONS.

THE AMERICAN ANNUAL CYCLOPEDIA for 1868. New York D. Appleton & Co.

This valuable work is continued this year in the very creditable manner which has secured for it heretofore a wide-spread and enviable popularity. Its frontispiece is an admirable likeness of Schuyler Colfax, whose prominent position before the country renders the engraving as fitting a selection perhaps as could have been chosen. The opening article is one on Abyssinia, geographical and historical, embodying the history of the recent war, resulting from the savage obstinacy of King Theodore in retaining English prisoners. It is a valuable and interesting article. Some important information is also furnished upon our newly-acquired territory in Alaska. The article on "Literature and Literary Progress in 1868," is an excellent and carefully-prepared summary of information in regard to that interesting topic. Among the scientific notices we observe a well-written article on "Astronomical Phenomena and Progress," containing a well-prepared account of the "Total Solar Eclipse," and the results of the various expeditions sent to observe it. The lunar crater, Linne, and other supposed changes in the moon, observations upon nebulae, and suspected changes therein, are also noticed. It would be vain for us to attempt an elaborate notice of the rich and varied contents of the volume. Suffice it to say, that no one who desires a work of reference, fully up to the times, can afford to do without it.

We are in receipt of the REPERTORIUM DER TECHNISCHEN, MATHEMATISCHEN UND NATURWISSENSCHAFTLICHEN JOURNAL LITERATUR.—"Repertory of Literature, Technical, Mathematical, and Natural Science," issued by F. Schotte, Engineer and Librarian of the Royal Industrial Academy at Berlin, with the assistance of official data, under sanction of the Royal Prussian Ministry of Commerce, Trade, and Public Works. It is a valuable catalogue of German works relating to the subjects enumerated. It is issued monthly, and sold by M. Westermann & Co., German booksellers and importers of European literature, 471 Broadway, New York city.

BEAUTIFUL SNOW, AND OTHER POEMS. By J. W. Watson. Published by Turner Bros. & Co., Philadelphia.

It is very beautifully got up, and is sold at \$1.25.

"MARRIED" is the title of a new domestic novel, by Mrs. Newby, author of several well known works of fiction, just issued by Messrs. Turner Bros. & Co., Philadelphia. Price, 50 cents.

MANUFACTURING, MINING, AND RAILROAD ITEMS.

That portion of the Atlantic ocean occupying the triangular space between the Azores, the Canaries, and the Cape Verde Islands, has a thick growth of weeds, which, as our young readers will remember, occasioned gloomy thoughts in the breasts of the crews of Columbus' vessels. Though these weeds—*Fucus natans*—are now far from being so abundant as then, an enterprising Frenchman proposes their utilization, and he estimates that enough may be collected every year to make a fertilizing manure for more than a thousand million acres of land. The plan suggested is that the vessels employed in cod fishing should bring cargoes of the weeds at such times of the year as they cannot be engaged in fishing.

M. Dubois Captain has patented an improvement in refining metals. Instead of leading the vapors and gases disengaged during the process simply into water, he introduces fine wrought iron shavings into the chambers for their reception and condensation. He also brings them in contact with a jet of steam situated in the line of draft. Under the combined action of the steam and iron, the vapors of the sulphuric and sulphurous acid are decomposed and sulphate of iron is formed, which passes off in a state of solution. The reaction will be the same whatever metal may be substituted for the iron, although the product may be different, that is if the metal can be attacked by sulphuric acid.

A fearful disaster has occurred at Carnarvon, Wales, during the cartage of some packages of nitro-glycerin from the harbor to the quarries. The material exploded on the way, and the cart horses and the men attending were blown to atoms. The railway station, near the scene of the explosion, was torn to pieces, and a village a quarter of a mile distant, was much damaged by the shock, which caused great consternation among the inhabitants. Four men were killed by the explosion.

A correspondent says that there are now two salt wells in successful operation at Coshocton, Ohio, that the brine has been struck for a third, and the work of sinking a fourth is about half done. Large beds of fire clay are being discovered and also numerous bands of graphite. He considers the mineral wealth of the Muskingum Valley capable of extraordinary development, and adds that it is contemplated to build soon a railroad from Mahoning County, in a south-westerly direction, through the heart of the best mineral district in Ohio.

According to the London Mining Journal, the attention of society in Turkey is now directed to industrial enterprises, and mining operations are in great favor. A dozen concessions of rights to work minerals on national lands have been granted to companies and individuals.

An international exhibition of the products of workmen's labor will be held at London in 1870, and Mr. Thornton, the British Minister, has been requested to make the matter known to the citizens of the United States, which he will proceed to do when more fully advised in regard to details. The great aim is to develop physical labor throughout the world.

The Directors of the Connecticut Western Railroad Company, have voted at a meeting held in Hartford, to locate the road from Hartford to Collinsville, by way of Bloomfield, Tariffville notch, and North Canton. The road is to follow Brick Kiln brook from Hartford, through Blue Hills to Bloomfield.

The White River Journal, Devall's Bluff, Arkansas, tells us that Gen. Dunlap, of Goliad, Texas, has ramee plants growing on his plantation four feet high. He is the pioneer in that new field of enterprise in Western Texas.

Two new air compressors, each running ten drills, making a two-inch hole and capable of sinking a foot per minute, are said to be now put in at the west shaft of the Hoosac tunnel. Twenty-five dollars worth of nitro-glycerin is daily used at the central shaft.

The Mormons of Utah, during last year, irrigated and reclaimed 93,799 acres of land. Altogether they had a large amount of land under cultivation: 80,518 acres in cereals, 1,871 in sorghum, 6,839 in root crops, 766 in cotton, 29,876 in meadow, 906 in apples, 1,011 in peaches, 75 in grapes, and 135 in currants. The larger part of these lands is artificially irrigated.

Three tons of solid silver consigned to Chicago, recently passed through Davenport, Iowa. It was in bricks which weighed 1,500 to 1,504 ounces each. With one exception the bricks were in sealed leather sacks. The exception was bare. It weighed 125 pounds and 2 ounces, and bore the stamp "\$1,301.96." Most of the silver was from the Equator lode in Georgetown, Colorado.

Of the 10,027,500 furs sold in St. Petersburg, Russia, last year, about 9,000,000 were from Siberia and 186,500 from Alaska. The value of these furs in gold was about \$3,489,375.

The coinage of the branch mint in San Francisco for June was \$1,340,000 in gold, and \$8,000 in silver. The total for the year ending June 30, is given at \$19,016,000.

Edmund About, the well-known French writer, is engaged on a work on Workmen's Unions. The Emperor Napoleon, has, it is said, given him \$4,000 for the book.

A new telegraph cable has been successfully laid between Peterhead, Scotland, and the coast of Norway.

APPLICATIONS FOR EXTENSION OF PATENTS.

CORRUGATED REFLECTORS.—Bernard Goetz, of Philadelphia, Pa., has petitioned for an extension of the above patent. Day of hearing, September 20, 1869.

GRAIN SEPARATOR.—Peter Geiser, Waynesboro, Pa., has petitioned for an extension of the above patent. Day of hearing September 20, 1869.

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

RUBBER AND GUTTA-PERCHA HOSE.—E. L. Perry and Chas. Manheim, New York city.—The object of this invention is to provide rubber hose so protected at the ends as to prevent the canvas from exposure to water or air, which, when so exposed, as they are now constructed, takes up the water by capillary attraction and retains it to such an extent that the ends of the hose soon become weak and rotten, and burst by the pressure of the water.

ROCKING CHAIR.—Chas. Singer, South Bend, Ind.—This invention relates to improvements in the construction of rocking chairs with air blowing attachments, having for its object to provide a stand or base, for the support of a bellows, with tracks or rails on which the rockers, which are fixed close to the seat, may work, instead of on the floor.

CAR COUPLING.—J. C. Smith, Stoughton, Pa.—This invention relates to improvements in car couplings having for its object to provide a simple and reliable self-coupling apparatus, which may be uncoupled by a simple movement of a hand lever, and attached so as to be readily changed from one end to the other of the cars.

GRAIN CLEANER.—W. B. Smith, Clayton, Ill.—This invention relates to improvements in grain cleaning machinery designed to combine a fanning and scouring apparatus in one machine, and consists in the arrangement of the blowers, screens, and scouring apparatus relatively to each other. Also, in the arrangement of means for shaking the shoe which supports the screens. Also, in the arrangement of the air passages for distributing the air upon the screens, and for action upon the grain after leaving the screens.

WATCHSAFE.—J. W. Durham, Ripley, Tenn.—The object of this invention is to provide match safes capable of being readily connected to the clothes of the carrier, for convenience in using. The invention consists in providing hinged pins and catches for the same on one side for securing the boxes to the clothes.

MEDICINE SPOON.—Mrs. Susan C. Currie, New York city.—This invention relates to new and useful improvements in spoons, whereby it is designed to provide a spoon suitably adapted for administering medicine, having an attachment for connection to the cork of the medicine bottle, serving both as a cork screw or drawer, and for supporting the spoon in a conspicuous position where it will be readily noticed when wanted, and be prevented from being misplaced.

APPARATUS FOR UNLOADING GRAIN.—John Beattie, Chicago, Ill.—This invention relates to improvements in machinery for unloading grain in bulk from cars, and consists in an improved arrangement of means for gearing and ungearing the main winding drum with the driving shaft; also in a guiding arrangement for the main rope.

STRAW CUTTER.—F. B. Newton, Bouckville, N. Y.—This invention relates to improvements in feed cutters, designed to provide an improved construction of the same, calculated to facilitate the removal of the cutters for grinding; also certain improvements in the arrangements of the feed mechanism and the pressing apparatus.

CLOD FENDER FOR PLOWS.—R. A. Kelley, Hope, Ind.—The object of this invention is to provide an adjustable and yielding clod fender for plows, such as are used for plowing between the rows of young plants for cultivating, that will yield to the inequalities of the ground without jumping, and which may be readily adjusted to allow more or less earth to be turned up toward the rows of plants and turn the clods back into the furrow.

INJECTOR.—C. Hughes, Niles, Ohio.—This invention relates to improvements in injectors for feeding steam boilers, designed to simplify and cheapen the construction of the same, also to produce improvements in the operation thereof. The invention consists in an improved construction of the shell whereby common T-pipe joints may be used to form the same. It also consists in an improved arrangement of the water valve; also, in an improved arrangement of the steam valve for imparting a spiral motion to the steam and the water, making the jet more compact and less liable to be broken and neutralized by jarring and for packing the steam ports.

THRASHING MACHINE.—H. K. Averill, New Oregon, Iowa.—This invention relates to improvements in portable grain thrashing machines, designed to adapt them for the application of wind mechanism for operating them by hand power; also, to provide a straw chaff and grain carrier, and separating apparatus of improved construction, adapted for cleaning the grain ready for market, without the employment of fans by the action of the wind; also, to adapt the machine for the application of either wind or horse power, or both.

RAILROAD COUPLING.—R. F. Baughn, Lexington, Miss.—The object of this invention is to so construct a railroad coupling that it shall uncouple automatically, in case the car to which it is attached is thrown from the track or turned on a short angle with the next car ahead.

ELECTRO-MAGNETIC ALARM.—John G. Butler, New York city.—This invention relates to improvements in magnetic instruments for making signals or giving alarms, as, for instance, when connected with the doors and windows of a dwelling by the wires of a battery.

STOVE DRUM.—Marshall Turley and J. D. Bayless, Council Bluffs, Iowa.—This invention relates to a new and useful improvement in drums for radiating heat generated in stoves, and consists in the arrangement of radiating tubes, chambers, and jackets, and in placing in the tubes iron spirals for retarding the heated products of combustion.

CULTIVATOR.—D. H. Paul, De Witt, Iowa.—This invention relates to a new and useful improvement in cultivators, and has for its object the prevention of the choking or clogging of the implement by weeds, stalks, and similar trash.

WATER GATES.—Vernon E. Smith, Lancaster, N. H.—This invention relates to a new and improved arrangement for operating water gates in discharging water on to water wheels, and for all other purposes for which water gates are used.

SECURING BUTTER JARS.—Moses H. Nichols, Hancock, N. Y.—This invention relates to a new and useful improvements in means for securing and protecting jars of butter, lard, preserved meats, fruits, desiccated vegetables, and other articles which are placed in glass or stone jars or pots for preservation from the air and for transportation.

CHIMNEY TOP.—William Mushash and Chas. R. Smith, Middletown, N. Y.—This invention relates to a new and useful improvement in a fixture for topping-out chimneys.

MOTION FOR REAPERS AND MOWERS, AND OTHER PURPOSES.—George S. Ellard, Westerly, R. I.—This invention relates to a new and improved method of producing a reciprocating motion, more especially designed for reapers and mowers in operating the cutter bars of those machines, but applicable to other purposes.

LOG TURNER AND LOADER.—Samuel Snyder, Delaware, Ohio.—This invention relates to a new apparatus, by means of which logs can readily be turned on stationary and portable corn mills, and by means of which also logs and lumber of all kinds can readily be loaded upon sleds, skids, or other devices.

MOISTENING ATTACHMENT TO LITHOGRAPHIC MACHINES.—John Crawley, Brooklyn, N. Y.—The object of this invention is to regulate the flow of water from the water reservoir to the absorbing fabric by which the lithographic stone is moistened, and to prevent the too rapid discharge of the water.

INVALID BEDSTEAD.—Franklin H. Smith and Wm. F. Wood, North Haverhill, N. Y.—This invention relates to an improved bedstead for invalids, which is so arranged that the occupant can be elevated above the bedding to have the same rearranged.

BAG FILLER.—Asa J. Olney, Van Buren, Ind.—This invention relates to a new bag-filling attachment to the elevating apparatus of winnowing machines, and has for its object to be readily detachable, and to operate without injuring the bags.

COMBINED YARD MARK AND KNIFE.—E. D. Richardson, Chariton, Ohio.—This invention relates to a new device to be applied to counters in stores and salesrooms, and has for its object to serve at once as a measure like the ordinary buttons put into counters, and as a knife for cutting the edge of the cloth or fabric measured preparatory to tearing the same, and for cutting twine, etc.

TELEGRAPH SOUNDER.—Wm. E. Davis, Jersey City, N. J.—This invention relates to a new manner of constructing the sounding column of a telegraphic sounding apparatus for the purpose of producing a clearer tone, and also to certain improvements in the construction of the other parts that pertain to such apparatus.

MAGIC LANTERN.—L. J. Marcy, Newport, R. I.—The object of this invention is to prevent the over-heating of case, or shell, of a magic lantern and of the lenses, and to provide a convenient manner of removing and inserting the lamps.

MUZZLING FOR DOGS.—Hermann Kaempf, Newark, N. J.—This invention relates to a dog's muzzle, which is so constructed that it will be light, substantial, and entirely reliable, without being in the least cumbersome to the animal, and without preventing the same from drinking. The invention consists in forming a muzzle, partly of wood rods, and partly of a flat metal spring, the collar band being an independent wire spring or ring.

HARROW.—Jay Knickerbocker, Dunning, Pa.—This invention relates to a new jointed harrow, which is so arranged by being made of several pieces, which are hinged together, that it will adjust itself to the nature of the ground, and that it may, to avoid trees, stumps, or rocks, be folded together, and made narrower without difficulty.

APPARATUS FOR OPERATING SCRAPERS.—James F. Brooks, Stafford Springs, Conn.—This invention relates to improvements in apparatus for operating scrapers, more especially adapted for employment in connection with an improved scraper, heretofore patented by me, which said improved scraper is liable to a considerable lateral or side draft, which it is the object of this invention to counteract.

HANGING WINDOW SASHES.—R. A. Warner, Columbus, Ga.—This invention relates to improvements in hanging window sashes, the object of which is to dispense with the employment of weights and the consequent necessity of providing the boxes for the weights. It consists in connecting an endless cord to the sash and passing it over pulleys at the top and bottom of the window frame, and applying friction to the pulleys to hold the sash suspended.

OIL CAN.—E. G. Kelley, New York city.—This invention has for its object to produce a cheap can, for retaining petroleum and other hydro-carbon or oily substances, and consists in the use of paper, or paper pulp, for this purpose, together with oil and water-proof cements or coatings for the cans.

LUBRICATOR.—H. A. Daniels, Thomaston, Conn.—This invention relates to a new adjustable lubricator, which can be turned in the journal box so as to adjust its valve to a greater or less supply of lubricating material. The invention consists in screwing the shank of the lubricator into the journal box, so that the valve stem may rest upon the shaft when the valve stem is open.

BORING TOOL.—Charles Carrol Strong, Defiance, Ohio.—This invention relates to a new boring tool, which is to be applied to lathes of all descriptions, and which is so arranged that it will be guided and held in the proper manner. The invention consists in arranging a loose collar on the tool, said collar turning freely on it, so that it may be supported in a suitable stand, or in the article bored, as may be desired.

SELF-CLOSING CIRCUIT KEY FOR TELEGRAPHS.—William E. Davis, Jersey City, N. J.—This invention relates to a new key for automatically closing the circuits of telegraph lines, and consists more particularly in the application to a swinging lever, by which the circuit can be opened and closed in the ordinary or suitable manner, of an elbow lever, which is by means of a spring held against the stationary part of the key, so as to automatically establish a circuit, when the apparatus is not used.

STEAM ENGINE.—F. C. Richey, Gilmer, Texas.—This invention relates to certain improvements in that class of steam engines in which an oscillating cylinder, for moving the driving shaft, is employed, and is applicable to locomotives or shops, as well as to stationary machines. The invention consists in a novel manner of introducing the steam into a valve box, arranged upon the cylinder, and in a novel packing device for the hollow trunnions of the cylinder; also in arranging a water box, around or on the supporting frame of the cylinder to receive the exhaust steam from the cylinder, and to utilize its heat by supplying the boiler with the water thus heated. The invention also consists in the application and arrangement of two pumps, which are used to inject water into the said box, to exhaust the steam, and to force the water from the box into the boiler.

DEVICE FOR DETACHING HORSES FROM CARRIAGES.—C. McElroy, New Baltimore, Mich.—This invention has for its object to furnish an improved device, by means of which the horses may be instantly detached from the carriage when desired, and which will securely connect the tugs to the shafts, holding them firmly.

PLOW.—A. G. and J. R. Cummins, McKenney, Texas.—The object of this invention is to provide a simple and effective substitute for the usual cumbersome and expensive gang plows, as heretofore made.

HAND STAMP.—E. D. Chamberlain, New York city.—The object of this invention is to provide for the common hand stamp, a simple and convenient device, which will always indicate to the eye the day of the month to which the stamp is set, without putting the operator to the inconvenience of turning the stamp bottom up, or of taking an impression in order to ascertain when he has turned the cylinder to the right point.

DEVICE FOR PROPELLING CARRIAGES.—Thomas A. Hares, New York city.—The principle involved in this invention, is that of employing a spring and clockwork apparatus for driving each wheel, there being one such apparatus on each side of the carriage, and the driver winding up the apparatus on one side, while that on the other is running down and impelling the carriage forward. In connection with these devices is a steering apparatus, and a new and improved form of the carriage to adapt it to the mechanism employed, and the use to which it is to be put.

LOCK WARDROBE HOOK.—Oscar Nicholson, New York city.—This invention has for its object to furnish an improved wardrobe hook, for holding clothing in halls, offices, and other places to which others beside the owner of said clothes have access, which shall be so constructed and arranged that it may be securely locked to secure the clothing from being carried off.

REVOLVING DINING TABLE.—R. Wilson, Rees Corners, Md.—This invention has for its object to furnish an improved dining table, which shall be so constructed and arranged that the plates and other dishes, which the guests use in dining, may stand upon a stationary part of the table, and the dishes from which the guests are served, may stand upon the revolving part of the table, so that each guest can conveniently bring any desired dish within his reach.

REVOLVING SCREEN FOR CLEANING GRAIN.—Daniel Loeffel, Mount Vernon, Ind.—This invention has for its object to furnish an improved revolving screen for separating small seeds from wheat, or other grain, which shall be simple in construction and effective in operation.

COMBINED DRILL AND SEEDER.—John E. Buxton, Owatonna, Minn.—This invention has for its object to furnish a simple and convenient machine, which shall be so constructed and arranged that it may be quickly and conveniently adjusted, to operate as a drill or as a broadcast seeder, as may be desired, even while the machine is in motion.

SCROLL SAWING MACHINE.—William H. Dobson, Medina, N. Y.—This invention has for its object to furnish an improved tension scroll sawing machine, simple in construction, and convenient, effective, and reliable in use.

SEED SOWER.—J. G. Thompson, Stockton, N. Y.—This invention has for its object to furnish a simple, convenient, and effective machine for sowing different kinds of seeds, which is designed to be carried by the operator, and operated to sow the seed by hand.